

CLAIMS

1. A light guide which emits lights incident from an end face from an emitting face disposed along the longitudinal direction while having the lights reflected by two internal side faces thereof, characterized in that the sectional shapes of said two internal side faces are oval arc curves or paraboloid curves, and the concentrating position of lights reflected by one side face and the concentrating position of lights reflected by the other side face are different from each other.
2. The light guide according to Claim 1, characterized in that said light guide is unitarily formed.
3. The light guide according to Claim 1, characterized in that said light guide is configured by sticking together two half pieces, and oval arcs or paraboloids, which constitute reflective faces, are formed on the half pieces.
4. The light guide according to Claim 3, characterized in that a light scattering part is formed in the joining faces of said half pieces.
5. A light guide which emits lights incident from an end face from an emitting face disposed along the longitudinal direction while having the lights reflected by two internal side faces thereof, characterized in that the sectional shapes of both of said two internal side faces are oval arc curves, and the difference in focal distance between the oval arc curves makes the concentrating positions of reflected lights different.

6. A light guide which emits lights incident from an end face from an emitting face disposed along the longitudinal direction while having the lights reflected by the internal side faces thereof, characterized in that the sectional shapes have two oval arc curved areas, and the concentrating position of reflected lights differs from one oval arc curve to the other.

7. An image reader characterized in that an illuminating unit comprising the light guide according to any of Claim 1 through Claim 6 provided at an end face thereof a light source and a lens array for converging on a light receiving element lights radiated from this illuminating unit toward a document and reflected by the document or transmitted by the document are built into a box.

8. The image reader according to Claim 7 characterized in that two sets of said illuminating units are arranged, and the illuminating units are so arranged as to cause lights emitted from the emitting faces to irradiate the same area of the face to be read of the document.